# ENVIRONMENTAL MONITOR

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## Regional Environmental Offices: The Installation "Go-To" Resource

**By Robert Boonstoppel, Regional Counsel, Northern Regional Environmental Office**

For many military installation environmental managers and environmental law specialists, the Army's Regional Environmental Offices are knowledgeable resources that can help resolve sticky issues involving state regulations and legislation. Yet, even though the REOs have been a fixture of the Department of Defense since 1995, some installations and even DOD agencies are only now discovering their value.

The Regional Environmental Coordinators and Regional Counsel who staff REOs are the "go-to guys" for state regulatory and legislative questions matters. They support the Army/DOD mission by working to reduce inconsistent or inappropriate environmental legislative and regulatory requirements of the military. Small teams of regulatory and legislative experts, REOs have the ability to rapidly coordinate responses to environmental concerns that may adversely impact military training, readiness or environmental security. The partnerships they help establish among installations and state regulators enhance the nation's military readiness and promote environmental stewardship.

In 1994, the Deputy Under Secretary of Defense for Environmental Security committed the Department of Defense to establishing regional environmental coordinators (RECs) in each of ten U.S. EPA regions. in the United States. Their mission: to ensure greater coordination among the services of state and regional environmental issues that adversely impact military training and operations. DOD gave the U.S. Army executive agent responsibility for four of those EPA regions—Regions 4, 5, 7 and 8—and assigned the other six to the Air Force and Navy. The following year, the U.S. Army Environmental Center established Regional Environmental Offices on behalf of the Army REC executive agent, the Deputy Assistant Secretary of the Army (Environment, Safety and Occupational Health), in each of the four locations throughout its regions it had been assigned.

Today, REOs serve as the focal point for information and coordination of state and regional environmental issues related to Army activities. The REO staffs review pending and changing state regulations and legislation. When appropriate, they provide comments or testimony. They help installations understand how changes might affect them or how to minimize negative affects. REOs also help develop and facilitate successful partnership programs among state regula-

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## Inside...

# "A Regional Perspective"

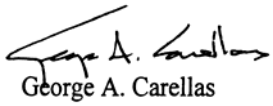
My holiday present to each of you is a very brief Regional Perspective. In keeping with my other Christmas presents this year, I've cut back. Actually, I enjoy communicating with you via this article, but my message this time is very simple. We certainly do not know what the future holds for our nation, our federal sister agencies, our states, and our military; but, times like these make us appreciate our family, our friends, our military, and our way of life. Looking back over this past year, it's amazing what you have accomplished through many collaborative efforts in Sustainability, P2, EMS, Clean-up, Natural Resources, and Compliance. These initiatives are making a tremendous difference in the world around us and for future generations…and it will only get better in the New Year. As such, I wish you a wonderful holiday season and "Thank You" for everything that you do for our country each and every day of the year.

## Thanks and Good-bye

It is with mixed emotions that I look back on this past year. It has been a great year largely in part to two folks who are no longer here. Jamie Higgins was recently promoted to a GS-13 position in the South Atlantic Division of the Corps of Engineers. Jamie helped start this office 6 years ago and was instrumental in many of our partnering efforts. Most people probably remember Jamie from her role in the Munitions Rule although she seemed to have a hand in most everything. I will really miss her – both professionally and personally – but, fortunately, we will still be working with her on many water projects and initiatives involving the military.

Also, Ed Engbert returned to the Army Environmental Center in Edgewood, MD, to be closer to family. Personally, I think it was the arrival of their fourth son that pushed them over the edge to find more baby-sitters. Anyway, Ed methodically went about the business of building numerous P2 partnerships, but his biggest accomplishment had to be the $2 million grant that is now being leveraged so wisely. The best illustration of the real benefits of this initiative is the project on Environmental Management System (EMS) training that will allow the installations in this region to become leaders within the DOD community. It is very exciting to see where all of this has taken us, and Ed was the catalyst in making it happen; in fact, without Ed, it would not have happened.

In summary, we lost two loyal, dedicated, hard-working team members; but their impact on the environmental programs in the southeast should not be lost on anyone. Thanks so much for their dedication, their friendship, and their time with us.



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# ENVIRONMENTAL MONITOR

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tory agencies and installations in all service components. They are the flag bearers for DOD/Army positions on state and regional environmental, matters, communicating them and facilitating their discussion among regulatory agencies and installations. REOs share cost-saving ideas and lessons learned with military installations and activities. They help installations prevent violations to state environmental laws and regulations, and when need be, they argue on behalf of the installation and DOD with state agencies.

Just as important is what the REOs and their staffs do not do: They do not make unilateral decisions or commitments on behalf of DOD or its components. They do not make environmental policy, or commit the resources of another component. They do not negotiate or sign agreements related to compliance, cleanup or other environmental security matters at another component's installation. And they do not bypass any component installation's chain of command. Each of the Army's four Regional Environmental Offices publishes a monthly review of state, legislative and regulatory activity, as well as quarterly regional newsletters and regional regulatory alerts. REO staffs also conduct roundtables and conferences on topical issues of interest to installation environmental program managers.

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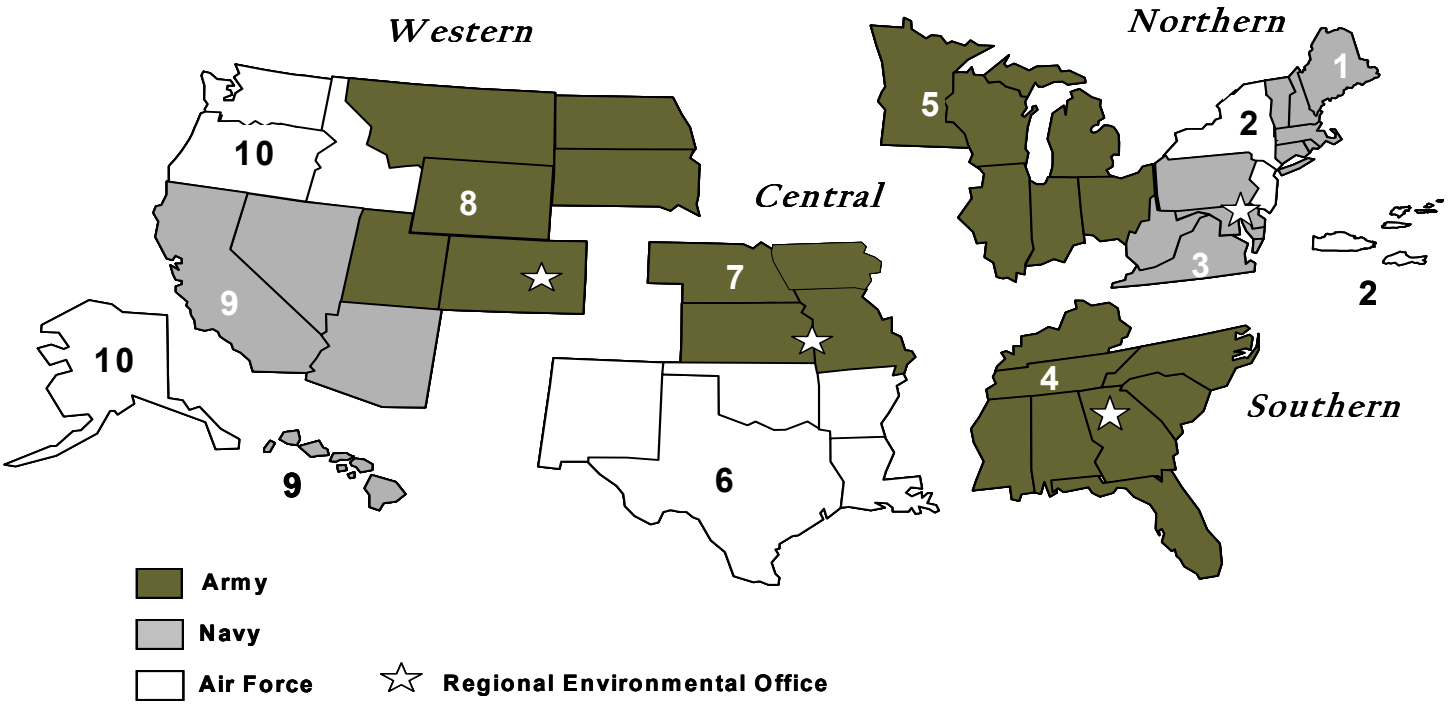


For more information about the Regional Environmental Offices and their role on behalf of DOD and the Army in state and regional regulatory and legislative affairs, contact the regional attorney in your region:

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## What's Wrong with a Dusty Road

Submitted by Doyle Allen
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Summers in the South can get hot and dry – especially at Fort Jackson, South Carolina. Along with this dry weather comes extreme dusty conditions on our extensive network of dirt roads, or to be more technically correct, unpaved roads. It is estimated that anywhere from 200 to 400 tons of soil per mile of road can be lost as dust every year.[1] Wow! That's a lot of dirt leaving the road! So what's the big deal? Many of us can remember as a kid, riding down the dirt road on the tailgate of a truck and dust flying everywhere.
Well, it is a big deal because there are some problems with all that dust. There are water and air pollution problems; there are health problems, and there are road maintenance problems.

When a vehicle, or convoy of vehicles, travels an unpaved road, dust particles are propelled into the air. Initially, this creates an air pollution problem with resulting health and safety risks. If soldiers are riding in an open vehicle, enough dust can cause respiratory problems. But the dust can also cause lower visibility, especially for any trailing or following vehicles. Once these particles drift and settle, they deposit in areas adjacent to the road. These areas can either be water bodies, or they will drain to water bodies. So what's wrong with a little dust in the water? Remember, the estimate is 200 – 400 tons of soil per mile of road potentially ending up in streams, ponds, and wetlands! That's water pollution. But, a more tangible consequence of a dusty road is increased maintenance and more rapid deterioration of the road surface. Dust is actually very fine soil particles. These fines are the "glue" that hold the larger soil aggregates in place. In other words, the dust that leaves the road is what holds the road together. Without the fines that are lost as dust, the road surface begins to deteriorate with pot holes and washboards. This results in poor and sometime unsafe road conditions and more frequent maintenance. So what can be done about this extreme, although very common, problem?

Research and demonstration projects have been conducted by various entities (including the RC&D report already mentioned[1] and the Army Environmental Center, Report # SFIM-AEC-EQ-CR-99002). A number of dust control products have been evaluated, with varying results for various products under varying conditions. At Fort Jackson, we decided to conduct a test on calcium chloride. This product seems to be the most effective, and the least expensive, and we have a local source. In our 2001 Erosion Control project[2], one site was a mile-long section of unpaved road that crosses Buffalo Creek. We reconstructed the road to provide proper drainage with a crown to shed water off the surface and vegetated waterways to carry runoff water away from the road. Geotextile cloth was used to provide a stable base for the sandy road and crushed granite was put down to harden the surface. After final grading of the road, calcium chloride was applied with a metered water truck. Then the road surface was compacted with a vibratory roller. The road on one side of the creek

was treated with the calcium chloride while the other side was left untreated, as a control. After 9 months, the results have been favorable. Calcium chloride performs as a dust suppressant by pulling moisture from the atmosphere. In fact, prior to the end of a 10 week drought, the treated section of road looked like a water truck had just sprayed the road. Dust has virtually been eliminated on the treated side with hardly a notice of pot holes or washboarding. The untreated side is extremely dusty in dry weather and pot holes began to form very quickly.

So a lot is wrong with the dusty roads that we grew up with. These unpaved roads will always be a problem. They will always require maintenance and upkeep. will always contribute to water and air pollution, and will always have some safety and health issues. However, through proper construction, maintenance, and dust control, unpaved roads can provide safe and economical access to training areas with minimal water and air pollution impacts.

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**Figure 1 This picture shows the section of road without CaCl treatment for dust control.**

**Figure 2 This picture shows the section of road treated with CaCl. Notice the dust cloud in the background on the untreated road, but no dust on the treated section.**

# BORROW PIT MANAGEMENT – HEALING LANDSCAPE SCARS

by
Tom Bryce, Supervisory Fisheries Biologist,
Fish and Wildlife Branch,
Fort Stewart, GA

"Borrow pits"…if you've spent any time in the country or around road construction projects, you'll hear this term thrown around. You might be asking, "Is the soil that's removed 'borrowed' for a while and then returned?" Actually, it's just a hole that's been excavated as a source of "fill dirt". Once excavated and removed, the dirt is gone forever, many times serving as a foundation to a building or roadbed. The term dates back to the late 1800's and refers to an excavated area where material has been dug for use as fill at another location. Fort Stewart has been excavating borrow pits since it's establishment in 1940 and currently has hundreds of these pits scattered across the installation in various stages of excavation.

A site excavated as a source of fill dirt will result in a shallow to moderately deep hole in the ground that, if left in that condition, can become a hazard to humans and wildlife. If not maintained appropriately, these pits can be a site of severe erosion and sediment runoff to adjacent streams and wetlands. They also can become shallow holding basins for water and breeding sites for mosquitoes. These pits have notoriously been used as garbage pits in some neighborhoods. In other words, borrow pits can be an unattractive nuisance and an overall eyesore. In short, abandoned borrow pits can often become environmental scars across the landscape.

Installation environmental specialists and biologists are working together to improve excavation efficiency, pit management, and in many cases converting them to useable fish ponds and wetlands after the pit is no longer needed as a source of fill. Excavation standards are necessary in order to maximize the amount of fill dirt that can be effectively used from the pit, to minimize erosion and sedimentation, to preserve the water quality of adjacent streams and wetlands, to protect air quality during excavation, and to prevent wildlife from falling into the pit. An added bonus is the plan's objective to reclaim these sites as useable fishing ponds.

Once a borrow pit has been abandoned by a contractor or unit and no more fill dirt of adequate quality can be removed from the pit, the pit is turned over to the DPW Fish and Wildlife Branch for conversion to a fish pond if there is an adequate water supply to fill it. This woody debris will serve as habitat for fish spawning, feeding, and protection and thus attract fish for anglers to more effectively target and catch. Once the pit fills to a full pool, the pond will be stocked with fingerling fish. To improve fish growth and future production, the pond will also be limed and fertilized.

The fish that are stocked in these reclaimed borrow pits include largemouth bass, bluegill sunfish, redear sunfish, and channel catfish. However, in the process of filling or during the life of the pond, other fish such as black crappie, warmouth sunfish, bullhead catfish, and other native species may accidentally find their way into the pond. Before the stocked pond is opened to the public for fishing, the fingerling fish are given adequate time to spawn at least once and to grow to a catchable size.

When it comes to managing the borrow pits on Fort Stewart, the Army has demonstrated that they can perform miracles by turning nothing (a hole) into something (food on the table and fun for the family)…all while successfully conserving our natural resources and protecting our environment!

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# NEWS FROM THE INSTALLATION SERVICES

### Environmental Management Systems marks shift in the way the Navy conducts its environmental programs.

The Navy is changing the way it conducts environmental management. Under the past system of management, the Environmental Compliance Evaluation (ECE) process focused on compliance. With the new system, the Environmental Management Systems (EMS) focuses on performance and process improvements. By focusing on performance and process improvement, EMS recognizes the environmental organization, along with safety, fire, mission critical operations, and top-level support, as the primary stakeholders and decision makers in developing fully successful environmental programs. It is the goal of a successful EMS to ensure that established environmental programs are sustainable and effective, and support day-to-day planning and mission critical operations.

### Support of EMS through Web-Based Awareness Training:

NAS Jacksonville and NS Mayport are completing modifications to the web-based Environmental Compliance Training Module developed by the Chief of Naval Education and Training (CNET) and the International Center for Leadership Development (ICLD) for NAS Pensacola. The module provides excellent just-in-time training and assessment for both station (military and civilian) and contractor personnel by providing web-based access to job specific environmental information. All contracts will require the prime contractor job superintendents to successfully complete applicable module(s) prior to starting work on the Station. Focused modules include building construction, demolition or renovation, equipment repair, pesticide application, painting, aircraft maintenance, excavation, etc. The NAS Jacksonville module will be available for use by all personnel in early November. The NS Mayport training module is being developed concurrently. These and other efforts are instrumental in developing functional EMS's. For more information on these programs/initiatives contact: GIS System - David Jones, Environmental Director, (843) 764-4010; Environmental Training Module - Kevin Gartland, NAS Jacksonville Environmental Director, (904) 542-2717 ext 116; Cheryl Mitchell, NS Mayport Environmental Director, (904) 270-

### ANAD's Pollution Prevention Program an environmental success

by Dave Parks and Ralph Usrey

This year, recommendations for targeting hazardous waste streams were the focal point at Anniston Army Depot's Pollution Prevention (p2) Working Group's meeting.

The Hazardous Material Management System (HMMS) Team, in the Environmental Control & Engineering Division, Directorate of Risk Management at Anniston Army Depot began a Hazardous Material Minimization (HAZMIN) program designed to minimize procurement of hazardous material (HAZMAT) and the generation of hazardous waste. Through communication with depot-wide HAZMAT users it was discovered that unneeded HAZMAT could be re-utilized in other areas avoiding waste disposal costs.

A substantial cost avoidance savings has already been realized from the Team's efforts. The goal of the HAZMIN program is simple: the HAZMAT originator avoids a disposal cost, while the user avoids a procurement cost. When the HMMS Team is notified that excess HAZMAT requires disposal, the Team recovers and makes the HAZMAT available for free re-issuance to depot-wide users. The program is comprehensive, cost effective and user-friendly. Disposal costs are avoided through remarketing the items.

Some noteworthy accomplishments of the HAZMIN Program include:

Removal of HAZMAT from the Defense Distribution Depot - Anniston (DDAA) warehouses and re-utilization in depot maintenance areas. This initiative has saved both DDAA storage fees and procurement costs to purchase new material.

Recycling the antifreeze seemed to be the best option for eliminating this waste stream. Through the combined efforts of the P2 Working Group, HMMS, and HWSF, the first shipment of used antifreeze – 475 gallons - was collected and recycled. The depot not only eliminated this waste stream through recycling of antifreeze..

Aerosol can puncturing allowed the depot to dispose of emptied empty aerosol cans as non-hazardous solid waste.

Some of the items remarketed to date include batteries, various types of enamel, lacquer paints, strippable coating, aircraft grease, aerosol paints, chemicals from electroplating vat operations, sealing compounds, battery acid, solder, and sealing compounds. Current estimated cost avoidance/cost savings for calendar year 2001 were approximately $50,000.

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## SUBMISSIONS

Environmental Monitor welcomes article and photo submissions. Please send articles and photos to:

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